

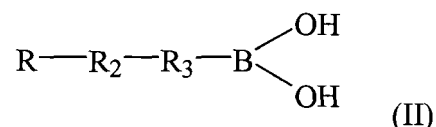
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1-11. (Canceled)

12. (Previously Presented) An analyte detector comprising:
a field effect transistor having a gate surface; and
a monolayer of molecules, each molecule bonded to the gate surface, the molecules having a structure (II):



wherein,

R is a ligand bonded to the gate surface;

R₂ is a (C₁₀ – C₂₄) alkylene, or (C₁₀ – C₂₄) alkenylene; and

R₃ is an (C₃ – C₁₄) cycloalkylene, (C₃ – C₁₄) heterocyclylene, (C₃ – C₂₄) arylene, or (C₃ – C₁₄) heteroarylene.

13. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein R₂ is a (C₁₀ – C₂₀) alkylene.

14. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein R₃ is a phenylene or naphthalene.

15. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein the ligand is thiol, phosphate, or siloxane.

16. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein the gate surface is a conducting surface.

17. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein the gate surface is a non-continuous conducting surface of the field effect transistor, and the monolayer of molecules form a non-conducting layer on the non-continuous conducting ~~semi-conducting~~ surface.

18. (Currently Amended) The analyte detector according to claim 12 ~~11~~, wherein the gate surface is an insulating surface.

19-34. (Canceled)